

## CLAIMS

1. A device for ligament reconstruction comprising:  
a tip and body portion having two parallel through-holes formed therein in juxtaposition; and  
5 a rear end portion having two through-holes formed therein in juxtaposition coaxially with the two through-holes of the tip and body portion,  
wherein the tip and body portion has a uniform and generally elliptical or rectangular cross section elongated in a direction in which the  
10 through-holes thereof are juxtaposed, so that the tip and body portion is driven into an articular bone to form a flat tunnel in the bone by hitting the rear end portion.
2. A ligament reconstruction device as set forth in claim 1, wherein the generally elliptical or rectangular cross section has a major axis/minor  
15 axis ratio of 2 to 5.
3. A ligament reconstruction device as set forth in claim 1 or 2, wherein the elliptical cross section is of a generally oval shape or a racetrack-like elliptical shape.
4. A ligament reconstruction device as set forth in claim 3, wherein the  
20 racetrack-like elliptical shape is defined by a pair of parallel straight lines spaced a distance of 3 to 6mm from each other and each having a length of 4 to 8mm and a pair of semicircles connecting opposite ends of the straight lines.
5. A ligament reconstruction device as set forth in claim 1 or 2, wherein  
25 the rectangular cross section has a minor edge length of 3 to 6mm and a major edge length of 7 to 14mm.
6. A ligament reconstruction device as set forth in any of claims 1 to 5, wherein the tip and body portion has a cross sectional area of 21 to 84mm<sup>2</sup>.

7. A ligament reconstruction device as set forth in any of claims 1 to 6, wherein the ligament reconstruction is reconstruction of an anterior cruciate ligament.

8. A method for ligament reconstruction utilizing a ligament  
5 reconstruction device as recited in any of claims 1 to 7, the method comprising the steps of:

drilling a single center guide pin into an articular bone and over-drilling the guide pin to a predetermined depth;

drilling two guide pins into the bone parallel to the center guide pin  
10 and then removing the center guide pin;

over-drilling the two guide pins; and

driving the tip and body portion of the ligament reconstruction device into the articular bone from a cortex of the articular bone toward a ligament attachment portion inside a joint by hitting the rear end portion  
15 of the ligament reconstruction device to form a flat tunnel into which one end portion of a ligament is to be inserted.

9. A ligament reconstruction method as set forth in claim 8, wherein the ligament is an anterior cruciate ligament with a bone piece.

10. A ligament reconstruction method as set forth in claim 8 or 9,  
20 wherein the ligament reconstruction is reconstruction of an anterior cruciate ligament, and the articular bone is a tibia.